Keyboard PC

User Manual

Version 1.0
Jun. 2010

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Table of Contents

Chapter 1

Introduction.....4
1.1 Specifications.....4
1.2 Safety Precaution.....5
1.3 Notes for Keyboard PC.....6
1.4 Package and options of Keyboard PC.....7

Chapter 2

Structure.....8
2.1 Keyboard PC Outline.....8
2.2 Power Switch & LEDs Summary.....10

Chapter 3

Installation.....11
3.1 Storage Setup.....11
3.1.1 Install SD Card.....11
3.1.2 Install SATA Hard Disk and settings.....12
3.2 Install Windows XP.....19
3.2.1 BIOS settings for Windows XP.....19
3.2.2 Install by a USB DVD/CD ROM.....20
3.2.3 Drivers download and install.....21
3.2.4 Optimizing Windows XP.....22
3.3 Switch display to TV or CRT.....28
3.3.1 Switch display to TV or CRT in the BIOS settings before installing Windows XP.....29
3.3.2 Switch display to TV or CRT in Windows XP.....31
3.3.3 Set TV resolution to 640x480 in Windows XP.....32
3.4 Boot From LAN.....35

Chapter 4

Warranty.....36

Chapter 1
Introduction

1.1 Specifications

Processor & Chipset	VortexMX+ x86 SoC, 1.0GHz
Memory	1GB DDR2
Storage	Onboard SATA connector x 1, (2.5" Bay, Internal) SD Socket x 2
Display	VGA & TV-Out **(For KPC-T version)** VGA-Out **(For KPC-C version)**
Network	10/100 Mbps Fast Ethernet
Audio	HD Audio-Realtek ALC262 CODEC With Stereo Speaker
Wireless Network	Connector for USB WiFi (Internal; Optional for USB Dongle 802.11 b/g/n) D-sub 15-pin for VGA
Output Connectors **FAN**	D-sub 9-pin for RS-232 RCA TV-Out **(For KPC-T version)** RJ45 LAN USB 2.0 x 2 Audio Jack, Line-out x 1, Mic-in x 1 SD Socket x 2 **(Bootable only, but no Hot-Swappable support)** Fanless Designed
Power Input	DC input 15V, External Power Adapter
Weight	0.9 Kg
	Support Windows XP / Linux
Operating System	(Option-1: Windows XP Home Edition) (Option-2: Ubuntu 9.04)

1.2 Safety Precaution

- **Do not** use 16Vdc or over of external AC/DC power adapter.
- **Do not** expose Keyboard PC to rain or moisture.
- **Do not** open the cabinet to avoid electrical shock when system is power-on.
- **Do not** expose dirty or dusty environment.
- **Do not** operate during a gas leak.
- **Do not** drop or place any object upon the top side of Keyboard PC.
- Keyboard PC of the ambient temperature should be 5℃(41℉) to 35℃(95℉)

1.3 Notes of Keyboard PC

◆ CE & FCC Class A Note

This equipment has been tested and found to comply with the limits for a Class-A digital device, pursuant to Part 15 of the FCC Rules and CE Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference in which case the user will be required to correct the interference at his own expense. Testing was done with shielded cables. Therefore, in order to comply with the CE and FCC regulations, you must use shielded cables with your installation.

◆ Operating System

Customer can order Keyboard PC with operating system of Windows XP Home Edition or Ubuntu 9.04 as optional directly, but users must be backup the original operating system by themselves. We recommend customers use GHOST.EXE for Windows XP Home Edition and R-Drive Utility for Ubuntu 9.04 to backup original operating system with all necessary drivers installed as a GHO or ACR file.

If users forget to backup the original operating system with all necessary drivers installed, please contact the nearest dealers to restore your system which may be charged the installation fee.

1.4 Package of Keyboard PC

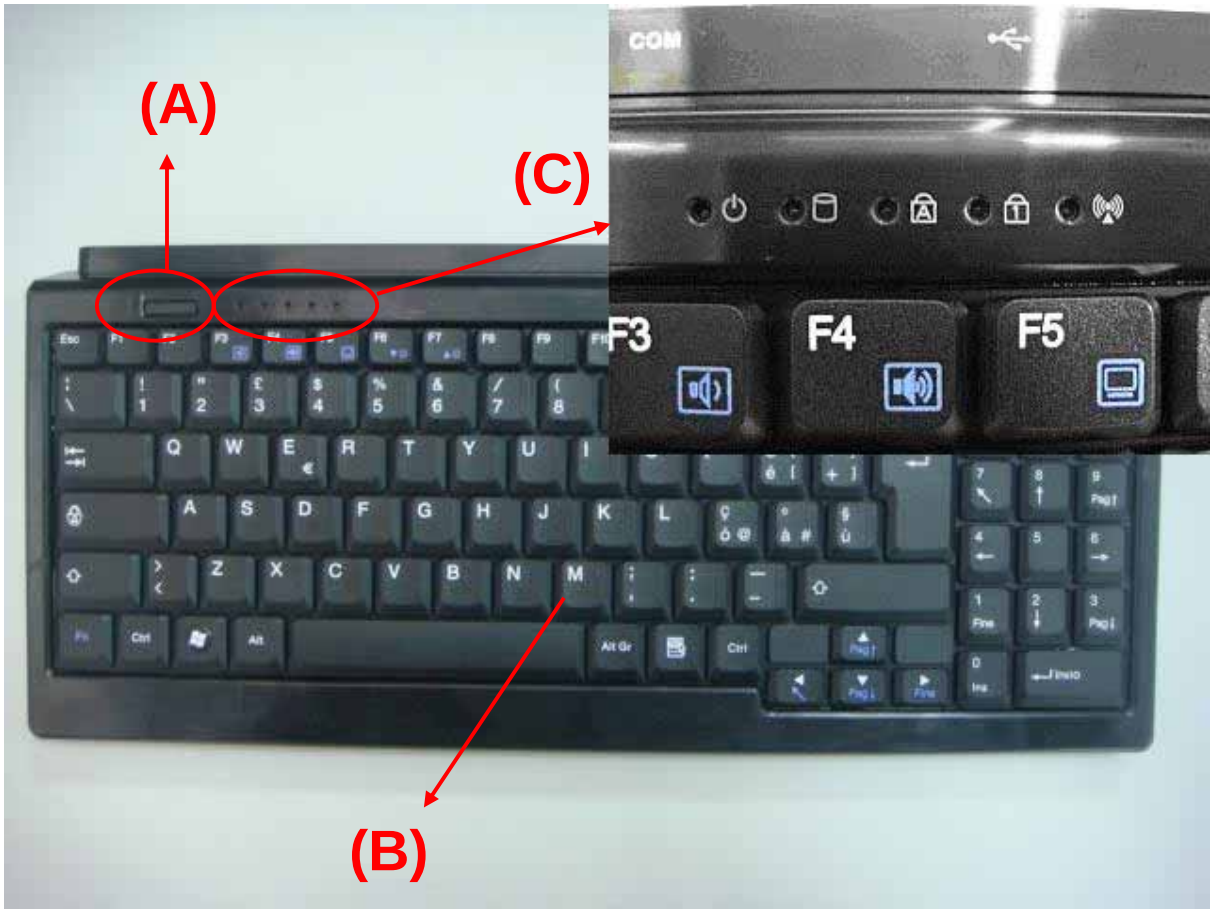
▲ Package List

Keyboard PC	x 1 piece
External Power Adapter (15Vdc)	x 1 piece

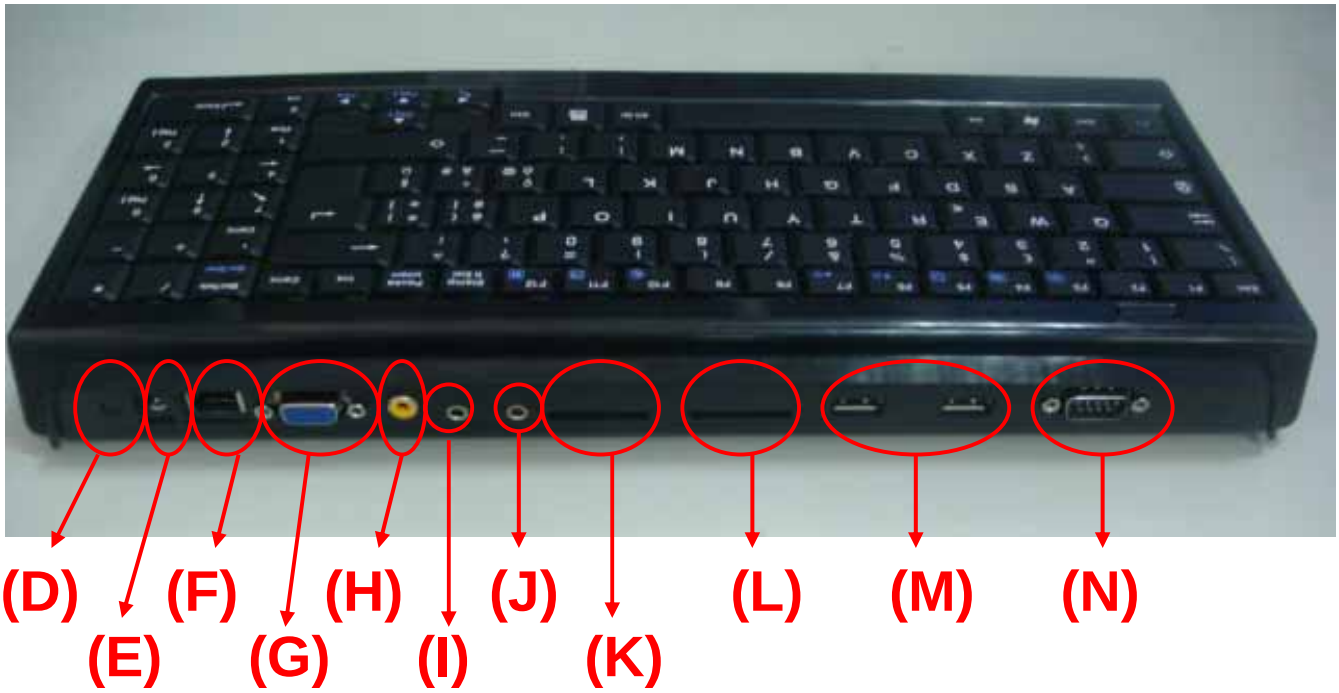
Chapter 2

Structure

2.1 Keyboard PC Outline



(A) Power Push Button
(B) Keyboard
(C) LEDs. **(Please refer the page-10 for more detail information.)**



(D) Reserved for Wireless Antenna and Cable. (Reserved)
(E) Power Jack for external 15V power adapter.
(F) 10/100Mbps Ethernet Port. (RJ45)
(G) VGA/CRT output.
(H) TV-Out.
(I) Line-Out.
(J) Mic-In.
(K) SD Socket. (Master)
(L) SD Socket. (Slave)
(M) USB 2.0/1.1 port x 2
(N) RS232 Port.

2.2 Power Switch & LEDs Summary

◆ Power Switch

After press this switch once, the system will be power on. For power off, please press this switch about 6 seconds.

◆ LEDs

Power Indicator.

SD/SATA-HDD Indicator.

Caps Lock.

Num Lock.

Wireless –Active Indicator.

Chapter 3
Installation

3.1 Storage Setup

▲ 3.1.1 Install SD Card

Please plug SD Card(s) upon Keyboard PC before power on.

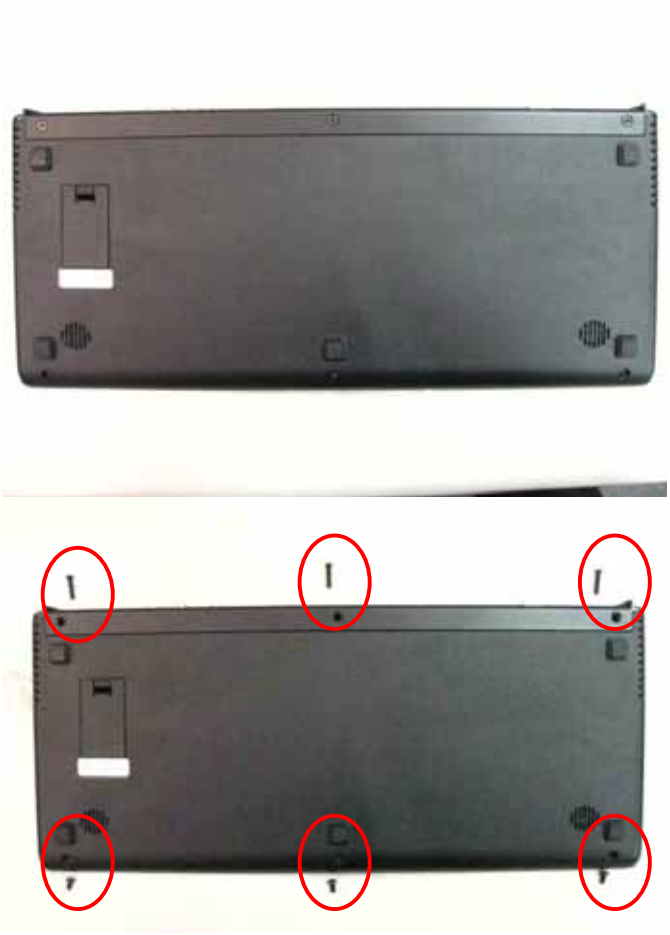
Note:

(1) Keyboard PC only supports SD Card booting, but no hot swappable support.

(2) Support SDHC-32GB or less.

▲ 3.1.2 Install SATA Hard Disk and settings

(1) Removing six screws on the back side.



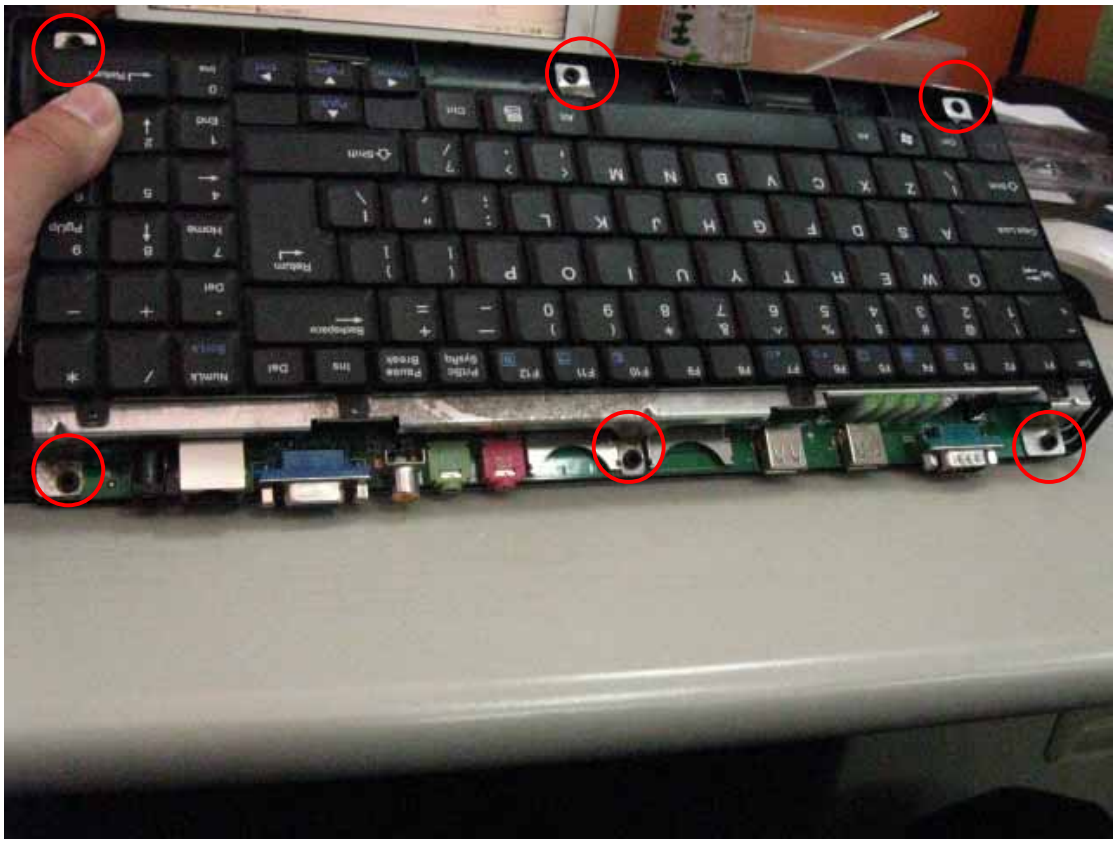
(2) Removing the iron shell.

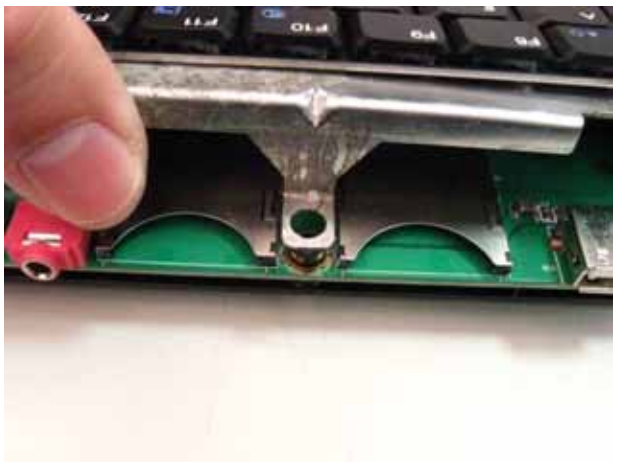
(3) Taking the plastic shell out.

(4) Pulling up jack panel to remove cable from daughter board.

(5) Removing 2 screws from daughter board.

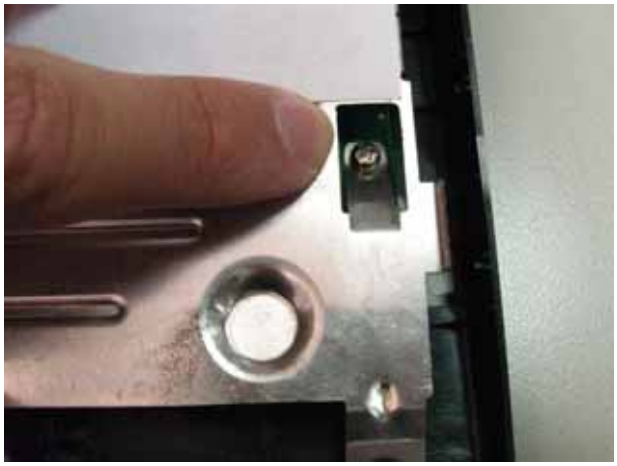
(6) Taking the silver board out from six points of daughter board.

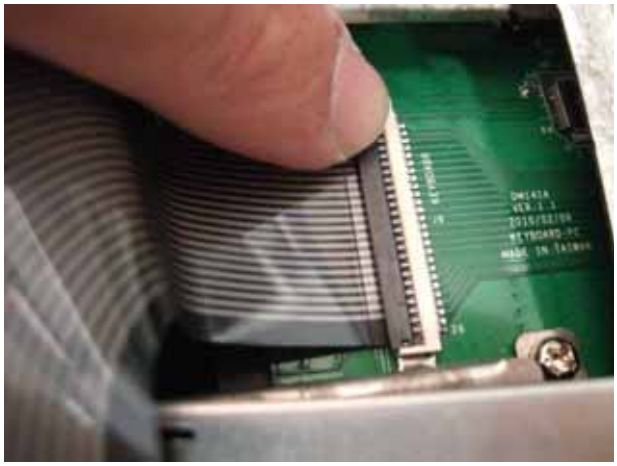


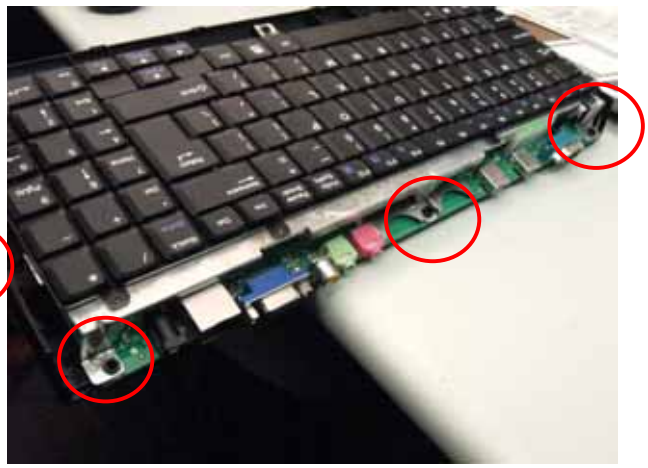


(7) Connecting SATA HD to Keyboard PC.

(8) Put silver board back and connect the six points with daughter board and also put cable and screws back.







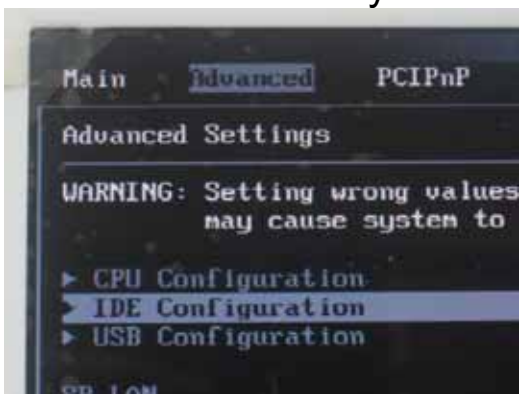
(9) Connecting plastic shell back with chassis. It must press with “click”.

(10) Tightening six screws to complete the installation.

(11) Power on and do the BIOS settings.

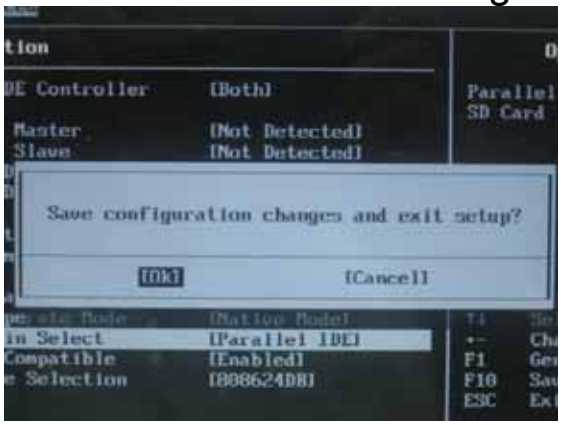
(i) Please press Power Switch to power on and then press “Del” into the BIOS settings.

(ii) Choose the selection of “Advanced” and “IDE Configuration”, and set “Primary IDE Pin Select” to “**Parellel IDE**”.



Advanced
IDE Configuration
OnBoard PCI IDE Controller [Both]
Primary IDE Master [Not Detected]
Primary IDE Slave [Not Detected]
Secondary IDE Master [Hard Disk]
Secondary IDE Slave [Not Detected]
Hard Disk Write Protect [Disabled]
IDE Detect Time Out (Sec) [35]
ATA(PI) 80Pin Cable Detection [Host & Device]
Hard Disk Delay [2 Second]
OnBoard IDE Operate Mode [Native Mode]
Primary IDE Pin Select [Parallel IDE]
Standard IDE Compatible [Enabled]
IDE Compatible Selection [808624DB]

(iii) Press “F10” to save the BIOS settings.



3.2 Install Windows XP

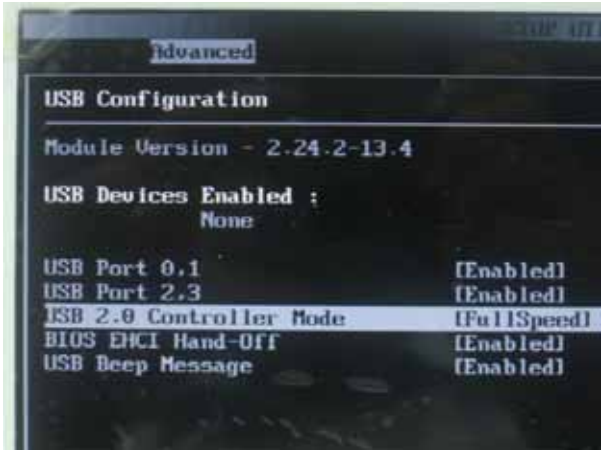
▲ 3.2.1 BIOS settings for Windows XP

Please make sure three selections to be correct setting.

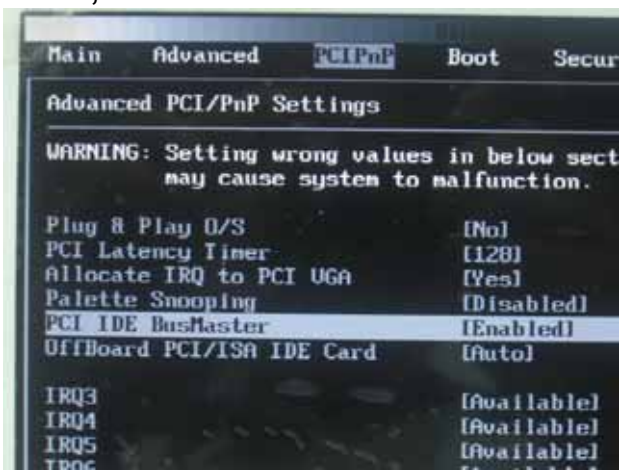
(1) At “IDE Configuration”, set “OnBoard IDE Operate Mode” to “Native Mode”

BIOS SETUP UTILITY
Advanced
IDE Configuration
OnBoard PCI IDE Controller [Both]
▸ Primary IDE Master [Hard Disk]
▸ Primary IDE Slave [Not Detected]
▸ Secondary IDE Master [Not Detected]
▸ Secondary IDE Slave [Not Detected]
Hard Disk Write Protect [Disabled]
IDE Detect Time Out (Sec) [35]
ATA(PI) 80Pin Cable Detection [Host & Device]
Hard Disk Delay [2 Second]
OnBoard IDE Operate Mode [Native Mode]
Primary IDE Pin Select [SD Card]
Standard IDE Compatible [Enabled]
IDE Compatible Selection [808624D8]

(2) At “USB Configuration”, set “USB 2.0 Controller Mode” to “FullSpeed”.



(3) At “PCIPnP”, set “PCI IDE BusMaster” to “Enabled”.



(4) Press “F10” to save the BIOS settings.

▲ 3.2.2 Install by a USB DVD/CD ROM

(1) Put the Windows XP CD Disk into the USB DVD/CD ROM.
(2) Plug in a USB DVD/CD ROM.
(3) Power on Keyboard PC.
(4) Press “F11” to choose USB DVD/CD ROM as a first boot device.

Please select boot device:
USB: ATAPI DVDROM 16X140J
HDD:PM-SA04G RDC SD-IDE HDS
↑ and ↓ to move selection
ENTER to select boot device
ESC to boot using defaults

(5) Follow the steps to install Windows XP.

▲ 3.2.3 Drivers download and install

(1) Please download all drivers for Windows XP by http://www.toypc.tw/files/Keyboard_PC_XP_Drivers.zip
(2) Unzip and copy all drivers to a USB Mass Storage.
(3) After system running Windows XP, please plug in that USB Mass Storage.
(4) **For HD Audio function**, please get into the folder of "**Audio-5895_PG280_UAAV10a-5013**" and then run "**Setup.exe**" to install the driver. You may need to reboot after finish installing.
(5) **For Wireless function**, please get into the folder of "**USB_WLAN_RTL8188**" and then run "**Setup.exe**" to install the driver.
(6) **For VGA function**, please get into the folder of "**TV-&VGA**" and then run "**Setup.exe**" to install the driver. After done, please reboot the system.
(7) **For Ethernet function**, please go to "Control Panel" => "System" => "Hardware" => "Device Manager" => Choose unknown device => Click the right key of touchpad or mouse => Choose "Update Driver…" => "Yes, this time only" => "Install from a list or specific location (Advanced)" => Tick "Include this location in the search" => click "Browse" and choose the driver location => "Next" => "Finish".

For Linux, please download the driver by http://www.toypc.tw/files/KPC_drivers_linux.zip.

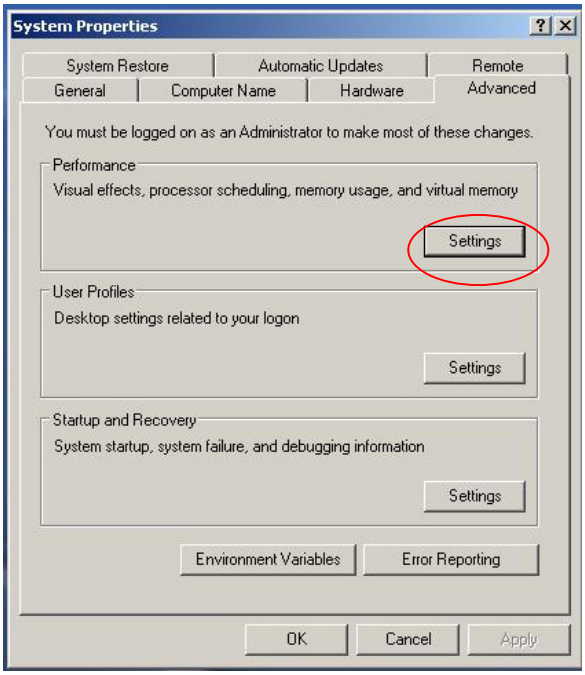
▲ 3.2.4 Optimizing Windows XP

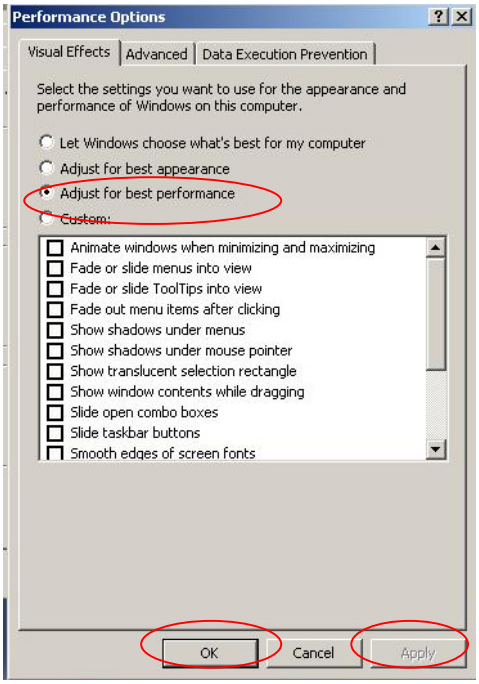
◆ Settings in Windows XP

● Adjust for best performance

(1) Go to “Control Panel” -> “System” -> “Advanced” -> Performance -> Setting.

(2) Please change to "Adjust for best performance" and then "Apply" and "OK".

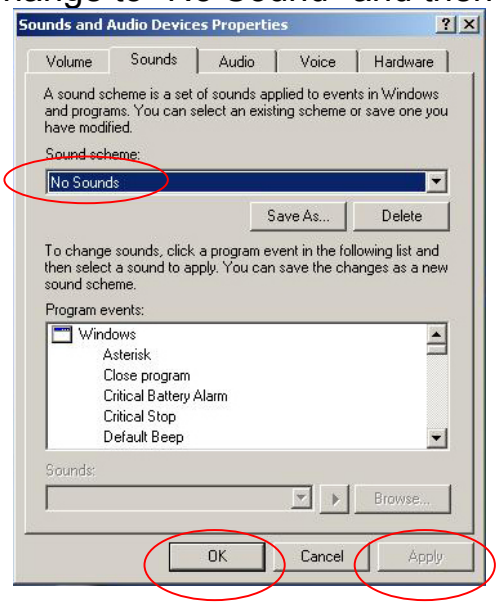



Performance Options
Visual Effects
Advanced
Data Execution Prevention
Select the settings you want to use for the appearance and performance of Windows on this computer.
Let Windows choose what's best for my computer
Adjust for best appearance
Adjust for best performance
Custom:
Animate windows when minimizing and maximizing
Fade or slide menus into view
Fade or slide ToolTips into view
Fade out menu items after clicking
Show shadows under menus
Show shadows under mouse pointer
Show translucent selection rectangle
Show window contents while dragging
Slide open combo boxes
Slide taskbar buttons
Smooth edges of screen fonts
OK
Cancel
Apply

● Sounds and Audio Device Settings

(1) Go to “Control Panel” -> “Sounds and Audio Device” -> “Sounds” -> “Sound Scheme”.

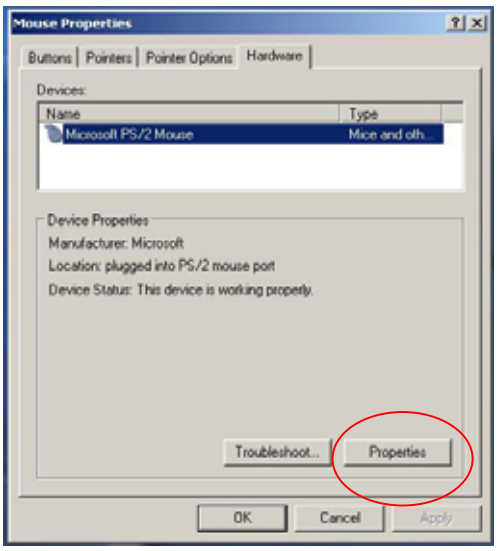
(2) Please change to "No Sound" and then "Apply" and "OK".

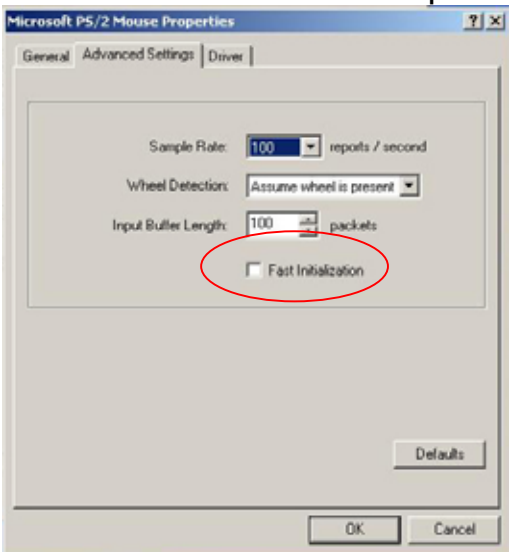


● Mouse Settings

(1) Go to “Control Panel” -> “Mouse” -> “Hardware” -> “Microsoft PS/2 Mouse” -> “Properties” -> “Advanced Setting”.

(2) Please do NOT select the " Fast Initialization" and press "OK"

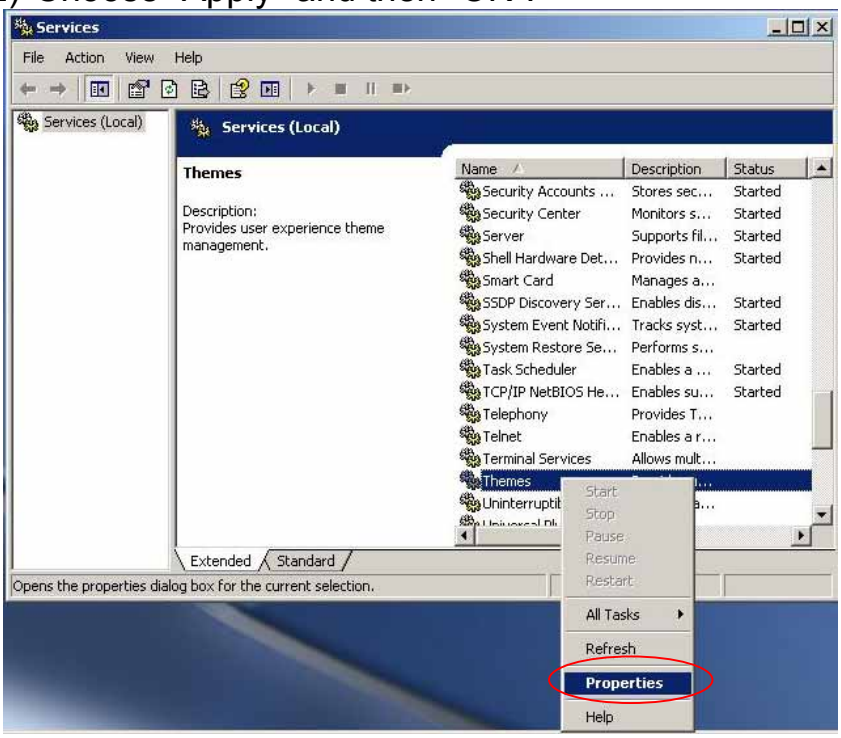


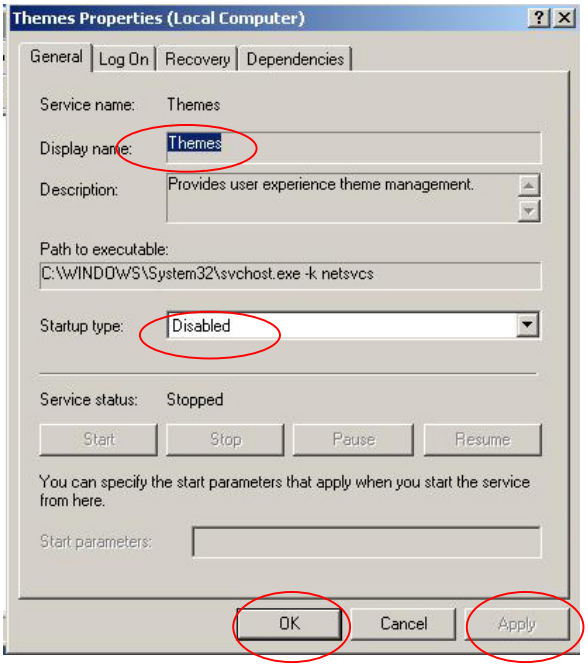


● Administrative Tools and Services Settings

(1) Go to “Control Panel -> “Administrative Tools” -> “Services” ->Click "Themes" -> Press the right key of mouse -> “Properties” -> Please "stop" the Service Status and "Disable" the Startup type.

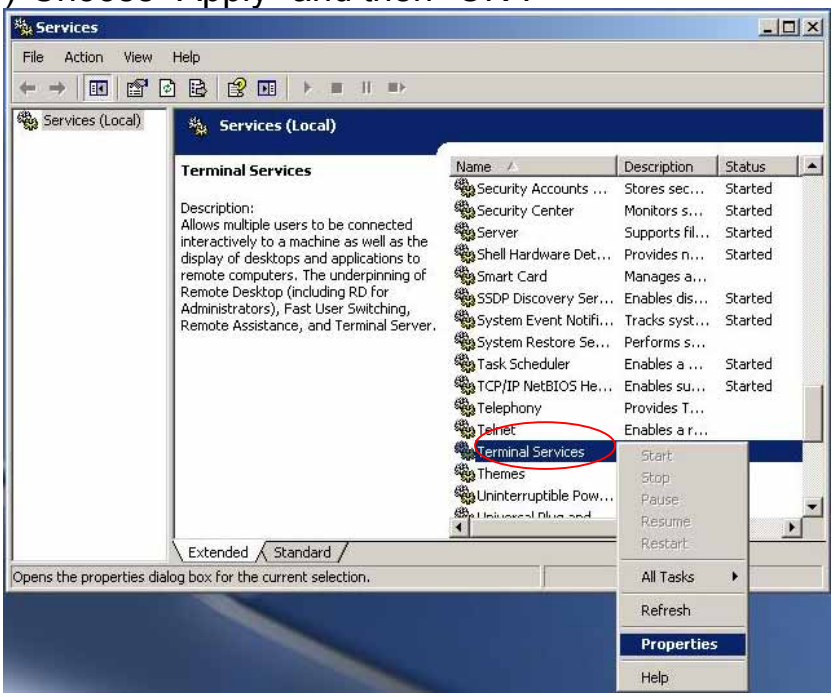
(2) Choose “Apply" and then "OK".

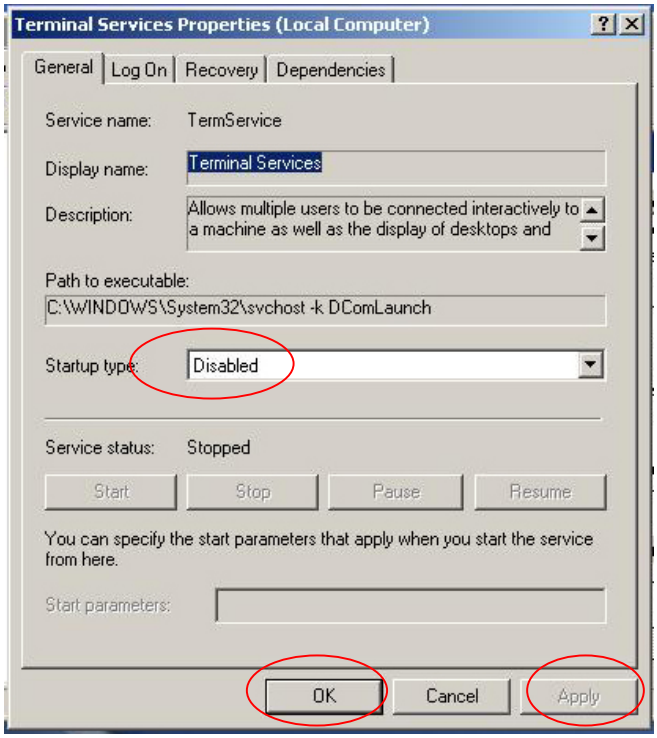




(3) Click "Terminal Services" -> Press the right key of mouse -> “Properties” -> Please "Disable" the Startup type.

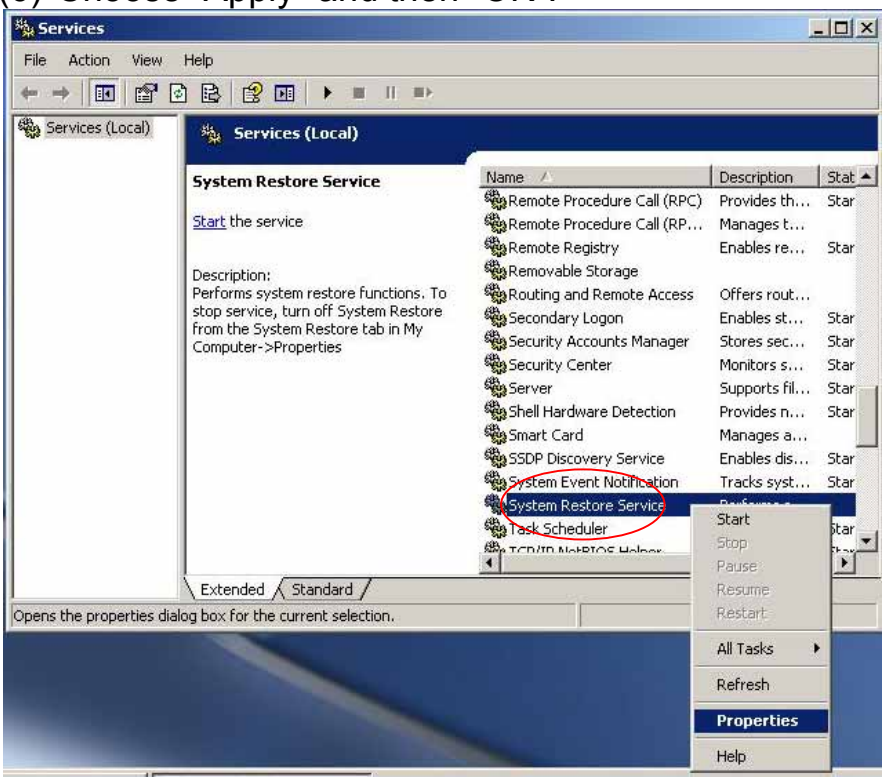
(4) Choose “Apply" and then "OK".

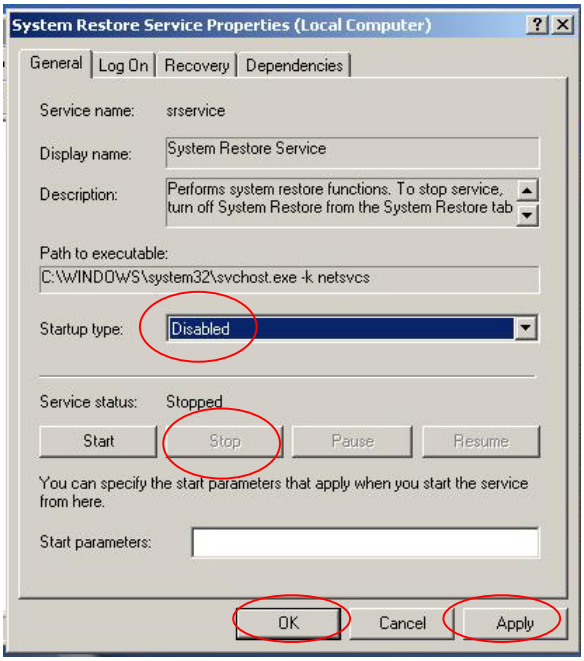



Terminal Services Properties (Local Computer)
General Log On Recovery Dependencies
Service name: TermService
Display name: Terminal Services
Description: Allows multiple users to be connected interactively to a machine as well as the display of desktops and
Path to executable:
C:\WINDOWS\System32\svchost -k DComLaunch
Startup type: Disabled
Service status: Stopped
Start Stop Pause Resume
You can specify the start parameters that apply when you start the service from here.
Start parameters:
OK Cancel Apply

(5) Click "System Restore Service" -> Press the right key of mouse -> “Properties” -> Please "stop" the Service Status and "Disable" the Startup type.

(6) Choose “Apply" and then "OK".

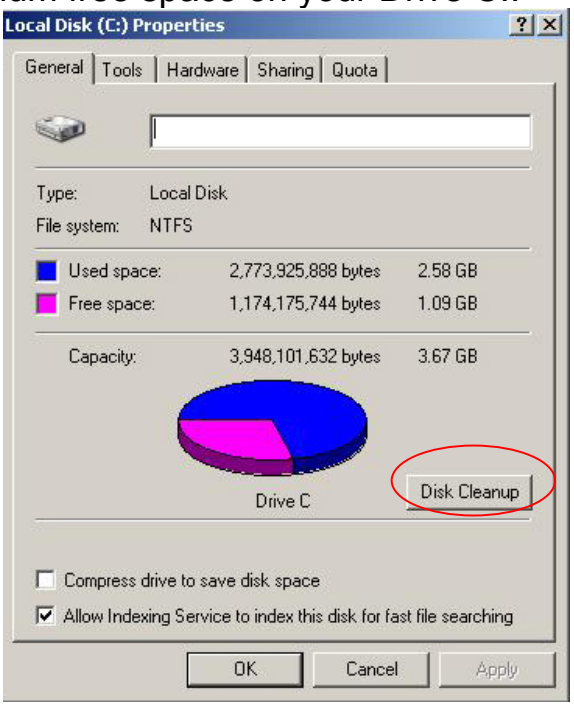


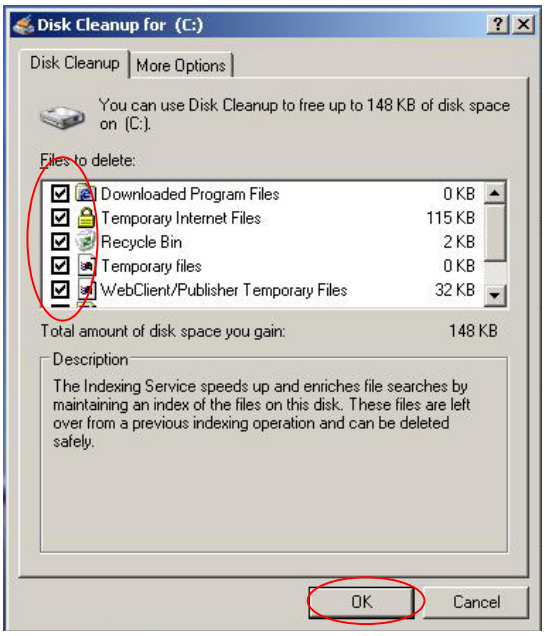

System Restore Service Properties (Local Computer)
General Log On Recovery Dependencies
Service name: srservice
Display name: System Restore Service
Description: Performs system restore functions. To stop service, turn off System Restore from the System Restore tab
Path to executable:
C:\WINDOWS\system32\svchost.exe -k netsvcs
Startup type: Disabled
Service status: Stopped
Start Stop Pause Resume
You can specify the start parameters that apply when you start the service from here.
Start parameters:
OK Cancel Apply

● Disk Cleanup

(1) Go to “My Computer” -> Local Drive (C:) -> Press the right key of mouse -> “Properties” -> “Disk Cleanup” -> “OK”.

(2) Please be sure to clean up all the useless files and keep the maximum free space on your Drive C:.




Disk Cleanup for (C:)
Disk Cleanup
More Options
You can use Disk Cleanup to free up to 148 KB of disk space on (C:).
Files to delete:
Downloaded Program Files 0 KB
Temporary Internet Files 115 KB
Recycle Bin 2 KB
Temporary files 0 KB
WebClient/Publisher Temporary Files 32 KB
Total amount of disk space you gain: 148 KB
Description
The Indexing Service speeds up and enriches file searches by maintaining an index of the files on this disk. These files are left over from a previous indexing operation and can be deleted safely.
OK
Cancel

3.3 Switch display to TV or CRT

The TV version of Keyboard PC includes TV-Out and CRT-Out functions as below. The part number for order is “**KPC-T**”.

[If your Keyboard PC can’t switch TV or CRT in the BIOS settings or Graphic utility of Windows XP, please make sure that you order part number is “KPC-T”, or contact your sales direct person. For “KPC-C” version, it supports CRT output only.]

▲ 3.3.1 Switch display to TV or CRT in the BIOS settings before installing Microsoft Windows XP.

(Please ignore and jump to instruction-2 if you just want to switch display in Microsoft Windows XP. This step is just for user choosing display output before installing Microsoft Windows XP.)

Users can choose either way to do it.

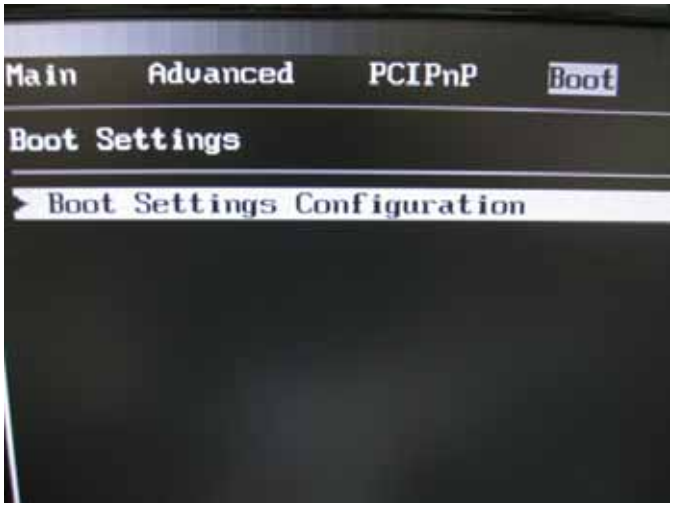
First way: Users can press key of keyboard to switch display after power on system directly.

Press "C" key: System will display and output to "**CRT**" (VGA).
Press "N" key: System will display and output to "**TV (NTSC)**".
Press "P" key: System will display and output to "**TV (PAL)**".

Second way: Users can go to BIOS settings as below.

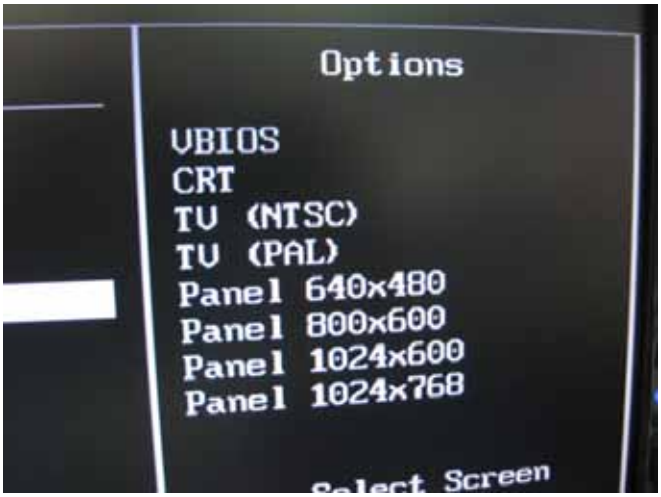
(1) Power on and press "**Del**" key into the BIOS settings.

(2) Choose "**Boot**" and "**Boot Settings Configuration**" selections.



(3) Set "**TV**" or "**CRT**" upon "**Boot Display Device**" selection.

(Please do not choose "**VBIOS**" or "**Panel…**" functions.)



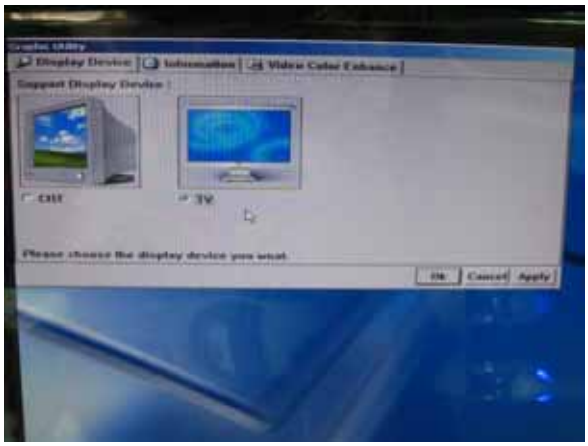
(4) Press "F10" to save the BIOS settings and exit.

▲ 3.3.2 Switch display to TV or CRT in Windows XP.

(1) Please download all drivers for Windows XP by http://www.toypc.tw/files/Keyboard_PC_XP_Drivers.zip

(2) Unzip and install all drivers and then reboot the system.

(3) After system rebooting, you will watch an icon upon the bottom of desktop. Please just click that icon by a USB mouse.



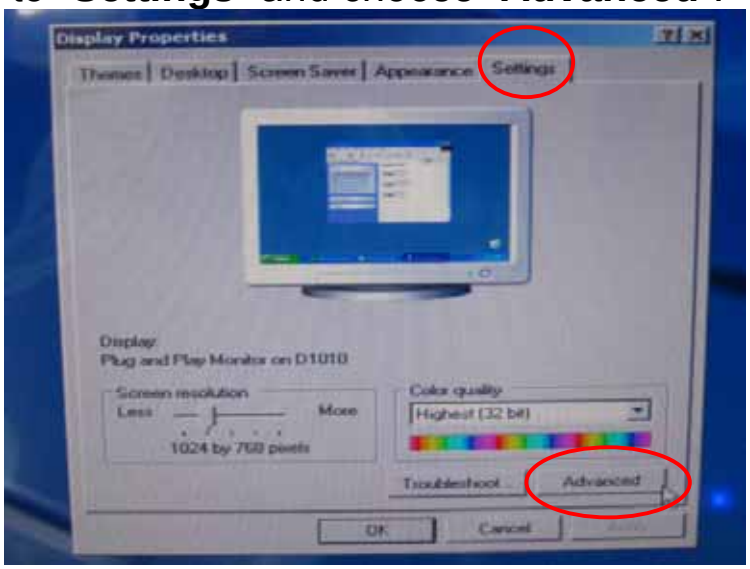
(4) You can plug in a CRT (VGA) Monitor and choose "**CRT**" to display and choose "**Apply**" and "**OK**" to be CRT (VGA) Output. Certainly, you can switch back to "**TV**" for TV output.

▲ 3.3.3 Set TV resolution to 640x480 in Windows XP.

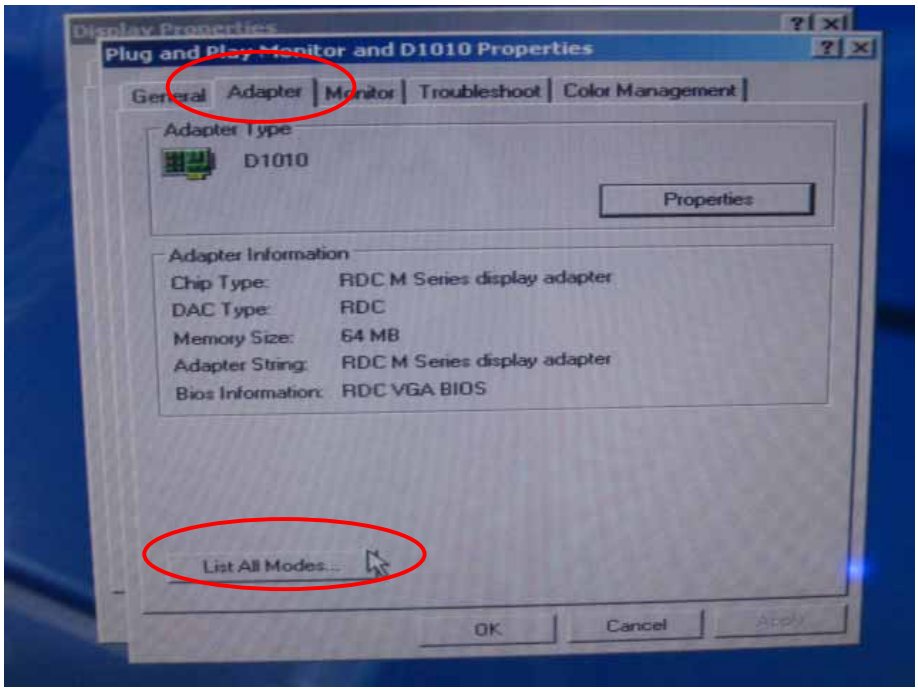
For smaller TV monitor, we suggest user to adjust the resolution to **640x480** for bigger words in Windows XP. Please look at the steps to adjust it as below.

(1) In desktop of Windows XP, please click the right key of USB mouse and choose "**Properties**".

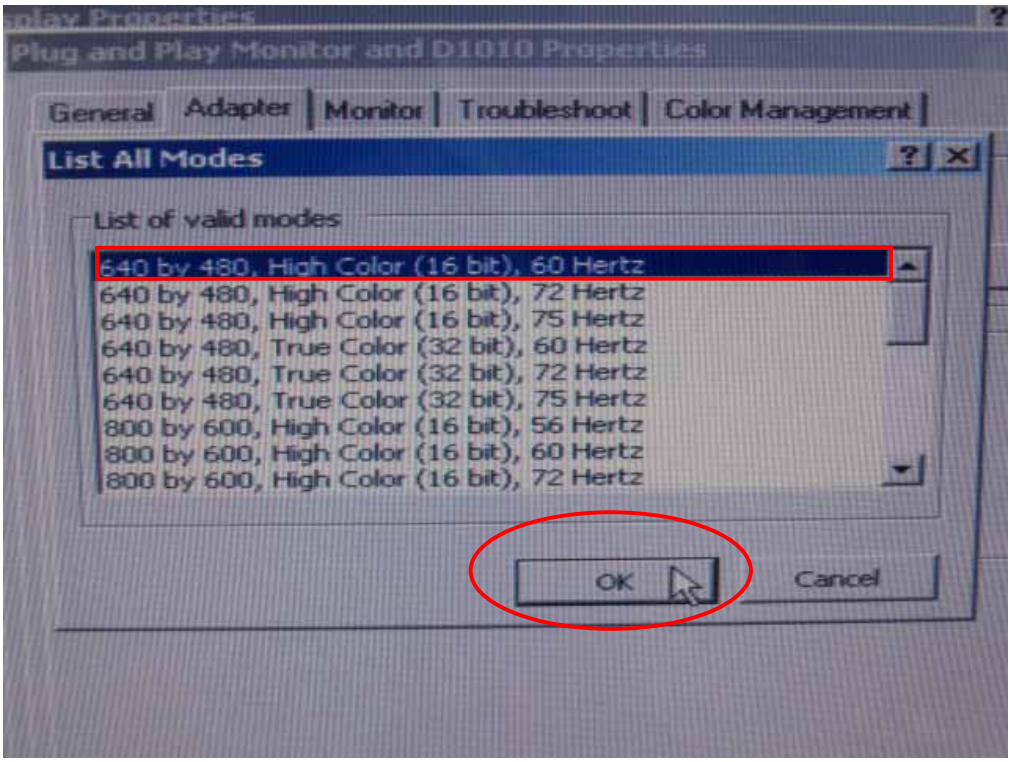
(2) Go to "**Settings**" and choose "**Advanced**".



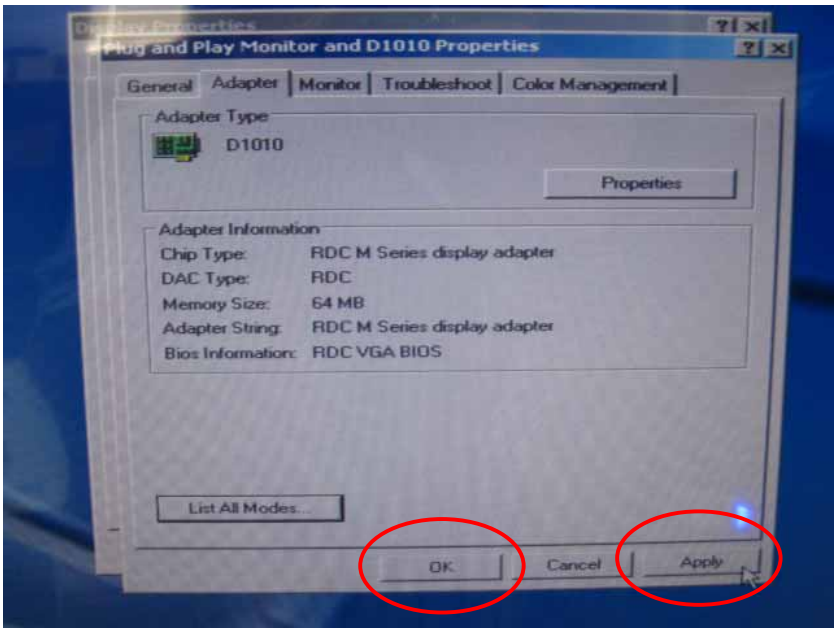
(3) Choose "**Adapter**" and "**List All Modes…**".



(4) Choose "**640 by 480, High Color (16 bit), 60 Hertz**" and "**OK**".

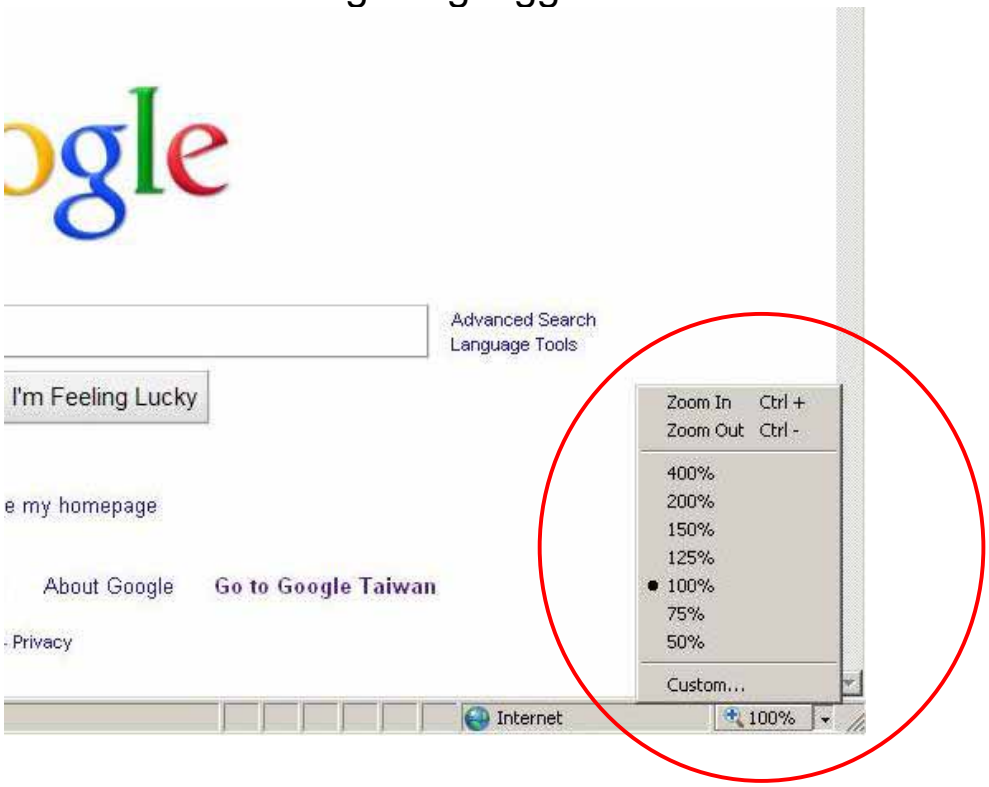

Plug and Play Monitor and D1010 Properties
General
Adapter
Monitor
Troubleshoot
Color Management
List All Modes
List of valid modes
640 by 480, High Color (16 bit), 60 Hertz
640 by 480, High Color (16 bit), 72 Hertz
640 by 480, High Color (16 bit), 75 Hertz
640 by 480, True Color (32 bit), 60 Hertz
640 by 480, True Color (32 bit), 72 Hertz
640 by 480, True Color (32 bit), 75 Hertz
800 by 600, High Color (16 bit), 56 Hertz
800 by 600, High Color (16 bit), 60 Hertz
800 by 600, High Color (16 bit), 72 Hertz
OK
Cancel

(5) Choose "Apply" and "OK".



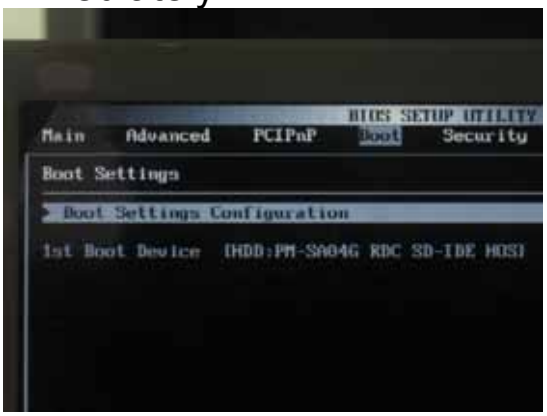
(6) Choose “OK” and exit Display Properties.

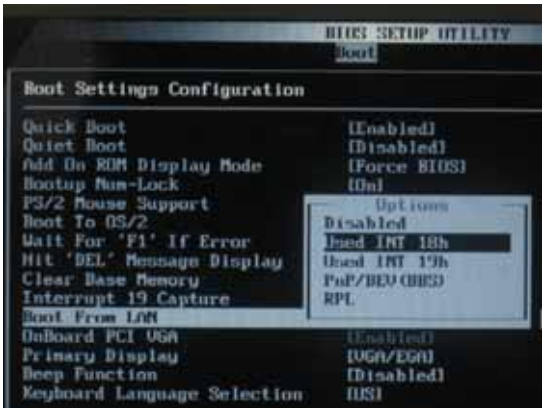
(7) For Internet Explorer, you can download IE7.0 (or above version) by Microsoft Website and extend the webpage from 100% to 150% for getting bigger words.



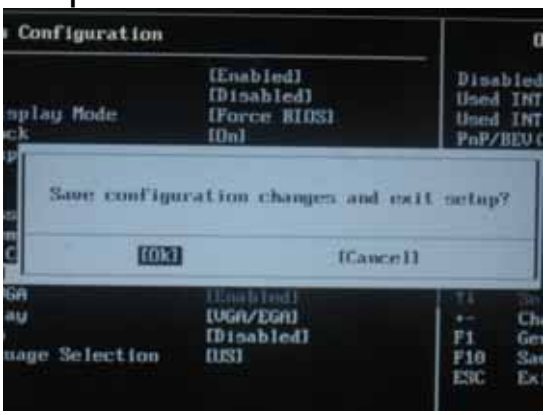
3.4 Boot From LAN

User can choose the Keyboard PC to boot from LAN. Please press “Del” key to get into the BIOS settings after power on, and then choose “Boot” and “Boot Settings Configuration” selections and set “Boot From LAN” immediately.


BIOS SETUP UTILITY
Main Advanced PCIPnP Boot Security
Boot Settings
Boot Settings Configuration
1st Boot Device [HDD:PM-SA04G RDC SD-IDE HDS]



After settings, please press “F10” to save the BIOS settings.



Chapter 4

Warranty

This product is warranted to be in good working order for a period of one year from the date of purchase except SD card which only has 3 months of the warranty. Should this product fail to be in good working order at any time during this period, we will, at our option, replace or repair it at no additional charge except as set forth in the following terms. This warranty does not apply to products damaged by misuse, modifications, accident or disaster. Vendor assumes no liability for any damages, lost profits, lost savings or any other incidental or consequential damage resulting from the use, misuse of, originality to use this product. Vendor will not be liable for any claim made by any other related party. Return authorization must be obtained from the vendor before returned merchandise will be accepted. Authorization can be obtained by calling or faxing the vendor and requesting a Return Merchandise Authorization (RMA) number. Returned goods should always be accompanied by a clear problem description.